

## Little Shrimp is Big Deal to Redstone Arsenal

Redstone Arsenal currently manages six species that warrant protection under the Endangered Species Act but the mention of none of them arouses such curiosity as that of the Alabama Cave Shrimp (*Palaemonias alabamae*). A little known member of the family Atyidae, the cave shrimp measures no more than 3 centimeters in length. Blind and nearly colorless, it is currently only known to exist in two caves in the world--one of which is Redstone Arsenal's Bobcat Cave.



Since its listing as an endangered species in 1988, Redstone's environmental office has worked to protect cave shrimp populations both on and off the installation. Redstone environmental office has engaged in numerous cooperative studies with local, state and federal agencies to better understand the Alabama cave shrimp and its habitat requirements. In fact, Redstone lead a cooperative effort with the US Fish and Wildlife Service and Alabama Geological Survey which found the second known population of Alabama cave shrimp in Herring, Braselton, and Glover caves (considered one cave system) in 1993. Hydrologic modeling was carried out for Bobcat Cave and the Herring, Braselton and Glover system. On Redstone, we in cooperation with the Alabama Geological Survey have monitored cave shrimp populations and water quality, including several detailed water fingerprinting studies in Bobcat Cave since 1995.

In addition to scientific research, the Redstone has teamed with local conservation groups to increase public awareness. The Flint River Conservation Association and the Keel Mountain Homeowners Association were formed with the help of Redstone environmental office biologists, to help protect the watershed of the Herring, Braselton, and Glover caves complex. Redstone Arsenal is also a founding sponsor of the Madison County Drinking Water Festival (formerly called the Groundwater Festival). Every year, thousands of Madison County fourth graders converge at the University of Alabama in Huntsville to learn about the importance of protecting our groundwater from non-point source pollution. The students learn that clean ground water is not only important to us for drinking water but that all creatures need clean water, including the Alabama cave shrimp.